



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

SEP 10 2001

DOT-E 10022
(THIRD REVISION)

EXPIRATION DATE: March 31, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Praxair, Inc.
Danbury, CT

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATIONS:

a. This exemption authorizes the use of a non-DOT specification steel cylinder with full removable head to be used as an overpack for salvaging damaged or leaking packages containing certain hazardous materials other than Classes 1 and 7. This exemption provides no relief from any regulation other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.40, 173.181, 173.192, 173.193, 173.195, 173.198, 173.201, 173.202, 173.203, 173.226, 173.227, 173.228, 173.301, 173.302, and 173.304 in that the use of a non-DOT specification package is authorized as prescribed herein.
5. BASIS: This exemption is based on the application of Praxair, Inc. dated April 1, 2000 submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description --	Hazard Class/ Division	Identi- fication Number	Packing Group
Materials (Classes 2, 3, 4, 5, 6, 8 and 9 except acetylene) authorized for transport in DOT specification cylinders under appropriate proper shipping names	As appropriate	As appropriate	As appropriate

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a non-DOT specification full-removable head, steel salvage cylinder of welded construction, with provisions for perforating damaged cylinders and safely draining contents of the cylinder placed therein. The salvage cylinder must conform with Ewal Manufacturing Company, Inc.'s drawing SK-148-DES 2 dated February 5, 1987 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). The salvage cylinder must be designed, constructed and stamped in accordance with Section VIII of the ASME Code for a working pressure of 300 psig and the following:

Volume	55 gallons water capacity (nominal)
Material	ASTM A-53 Gr. B, A-516 Gr. 70, SA-285 or equivalent carbon steel
Design stress	Per ASME Code, minimum factor of safety of 4:1
Outside diameter	16 inches, nominal
Length	64 inches, nominal
Sidewall thickness	0.250 inch nominal, (0.240 inch, min.)
Design service pressure (MAWP)	300 psig
Test pressure	450 psig
Openings:	
On sidewall	two - 1 inch diameter welded fittings

On removable top head	two - 1/4 inch NPT for valve and PRD
Pressure relief device(s)	one pressure relief valve set at 450 psig
Welded attachments	two lifting brackets and two forklift (lifting) brackets

b. MARKINGS - Each cylinder must be plainly marked on both sides near the middle, in letters at least 2 inches high on a contrasting background "DOT-E 10022" and "SALVAGE CYLINDER".

c. TESTING - At least once every 2 years, each cylinder must be visually reinspected (internally and externally) and hydrostatically retested to 450 psig. The visual inspections must be performed in accordance with the Compressed Gas Association's Pamphlet C-6. The retest and inspection must be made by an employee that is familiar with the salvage cylinder and is trained and experienced in the use of the inspection and testing equipment. Records of retest must be made available to a DOT representative upon request.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or change are made to the package or its contents and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. A current copy of this exemption, in its current status, must be maintained at each manufacturing facility at which this packaging is manufactured and must be made available to a DOT representative upon request.

d. A current copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.

- e. Drivers and persons who load/unload or transport the salvage cylinders must have been trained in handling and loading/unloading the salvage cylinder.
 - f. Damaged cylinders containing liquefied gases with a vapor pressure exceeding 300 psig at 70° F are not authorized.
 - g. The non-liquefied gases in damaged cylinders to be transported must be limited in pressure and volume so that if totally discharged into the salvage cylinder the pressure at 70° F will not exceed 300 psig.
 - h. Each salvage cylinder must be labeled as prescribed for the material in the damaged cylinder.
 - i. Each salvage cylinder must be secured to the motor vehicle by a securement system that conforms with the requirements contained in §§ 393.100 to 393.106.
 - j. Transportation is limited to motor vehicles owned or leased by Praxair, Inc. or owned or leased by contract carriers employed by Praxair.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each motor carrier used to transport packages covered by this exemption.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
 - o Registration required by § 107.601 et seq., when applicable.

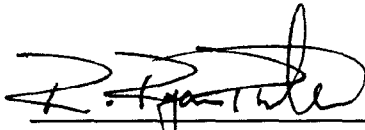
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must

receive training on the requirements and conditions of this exemption in addition to the training required by §§172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing of any incidents involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.



fa Robert A. McGuire
Associate Administrator
for Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

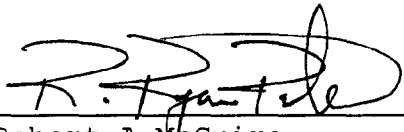
The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: sdc

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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Aeriform Corp. Houston, TX	5/16/00	5/26/2000	3/31/2002
Praxair Puerto Rico, Inc., Gurabo, Puerto Rico	3/1/00	4/4/2000	3/31/2002



To Robert A McGuire
Associate Administrator
for Hazardous Materials Safety